1   1.   A method of organizing stored information on a

2   non-volatile, re-programmable semiconductor memory

3   comprising:

4   partitioning said memory into a plurality of

5   partitions, each having a defined address; and

6   storing the defined address for one partition in

7   another partition.

1   2.   The method of claim 1 further including storing

2   information about the number of partitions.

1   3.   The method of claim 1 further including storing a

2   boot loader in one of said partitions.

1   4.   The method of claim 1 further including storing a

2   file system in one of said partitions.

1   5.   The method of claim 1 further including storing a

2   kernel for an operating system in one of said partitions.

1   6.   The method of claim 1 further including storing

2   information in association with said addresses about

3   whether or not an integrity check needs to be done on the

4   data stored at the associated address.

1   7.   The method of claim 1 further including storing,
2   in association with the address of a partition, information
3   about the type of information stored in the partition.

1   8.   The method of claim 7 further including storing
2   information about whether or not the information stored at
3   a given partition is a boot loader, a kernel or a file
4   system.

1   9.   The method of claim 7 including storing
2   information about the load address for said information in
3   association with said address.

1   10.   A non-volatile, re-programmable semiconductor
2   memory comprising:
3   a plurality of addressable partitions, including
4   a partition storing an operating system; and
5   a storage location storing an address for one of
6   said partitions in association with information about the
7   information stored in said partition.

1   11.   The memory of claim 10 wherein said memory is a
2   FLASH memory.

1   12.   The memory of claim 10 wherein one of said
2   partitions stores a basic input/output system.

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1   13.   The memory of claim 10 wherein one of said
2   partitions stores a file system.

1   14.   The memory of claim 10 wherein one of said
2   partitions stores a kernel for an operating system.

1   15.   The memory of claim 10 wherein one of said
2   partitions stores a boot loader.

1   16.   A method of initializing a processor-based system
2   comprising:
3   validating information stored in a non-volatile,
4   re-programmable semiconductor memory; and
5   using a allocation table stored in said memory to
6   find an operating system stored in said memory;
7   loading said operating system; and
8   executing said operating system.

1   17.   The method of claim 16 further including
2   selecting a boot loader to load said operating system.

1   18.   The method of claim 17 including using said
2   allocation table to locate said boot loader.

1   19.   The method of claim 16 including performing
2 initialization and the power on self test before validating
3 information stored in said memory.

1   20.   The method of claim 16 including validating
2 information stored in said memory using a cyclic recovery
3 check software stored in said memory.

1   21.   An article comprising a medium storing
2 instructions that cause a processor-based system to:
3   validate information stored in a non-volatile,
4 re-programmable semiconductor memory;
5   use an allocation table to find an operating
6 system stored in said memory;
7   load said operating system; and
8   execute said operating system.

1   22.   The article of claim 21 further storing
2 instructions that cause a processor-based system to select
3 a boot loader to load said operating system.

1   23.   The article of claim 22 further storing
2 instructions that cause a processor-based system to use
3 said allocation table to locate said boot loader.

1   24. The article of claim 21 further storing
2   instructions that cause a processor-based system to perform
3   initialization and the power on self test before validating
4   information stored in said memory.

1   25. The article of claim 21 further storing
2   instructions that cause a processor-based system to
3   validate information in said memory using a cyclic recovery
4   check software stored in said memory.

1   26. A processor-based system comprising:
2   a processor;
3   a volatile memory coupled to said processor; and
4   a re-programmable, non-volatile semiconductor
5   memory coupled to said processor, said semiconductor memory
6   including a plurality of partitions, one of said partitions
7   storing an operating system and another of said partitions
8   storing the addresses of the other partitions in
9   association with information about what is stored in each
10   of said partitions.

1   27. The system of claim 26 wherein said semiconductor
2   memory is a FLASH memory.

1   28. The system of claim 26 wherein one of said
2   partitions stores a basic input/output system.

1   29.   The system of claim 26 wherein one of said
2   partitions stores a file system.

1   30.   The system of claim 26 wherein one of said
2   partitions stores a boot loader.